Mr. Don Christenson
Rochester Metal Products Corporation
616 Indiana Avenue
Rochester, IN 46975

Re: Minor Source Modification No:
049-10821-00002

Dear Mr. Christenson:

Rochester Metal Products Corporation applied for a Part 70 operating permit on May 31, 1996 for a gray and ductile iron foundry. An application to modify the source was received on March 30, 1999. Pursuant to 326 IAC 2-7-10.5, the following emission units are affected by the change in emission factors, control efficiencies and increased production limits for an existing permitted gray and ductile iron foundry. The equipment involved in this modification consists of the following:

(a) Two (2) natural gas-fired preheaters/charge handling, known as 118, rated at a total of 21.5 million British thermal units per hour, equipped with a baghouse dust collector, known as DC9, preheaters installed in 1996 and prior 1974 and charge handling installed prior to 1974, exhausted through Stack SC-DC9, capacity: 34 tons of metal per hour total.

(b) Three (3) Hunter electric induction furnaces, known as 131, 132, and 133, modified in 1998, equipped with a baghouse dust collector, known as DC13, exhausted through Stack SC-DC13, capacity: 13 tons of metal per hour total.

(c) One (1) magnesium treatment operation, equipped with a baghouse for PM control, known as DC 10, exhausted through Stack SC-DC10, capacity:24 tons of iron per hour.

(d) One (1) Disa sand handling system, equipped with a baghouse for PM control, known as DC11, exhausted through Stack SC-DC11, capacity: 60 tons of sand per hour.

(e) One (1) Disa casting shakeout operation, equipped with a baghouse for PM control, known as DC11, exhausted through Stack SC-DC11, capacity 10 tons of iron per hour.

(f) One (1) Disa pouring/mold cooling operation, capacity: 10 tons of iron per hour.

(g) One (1) Disa casting/cooling operation, equipped with a baghouse for PM control, known as DC12, exhausted inside the building, capacity: 10 tons of iron per hour.

(h) One (1) Disa shot blast operation, equipped with a baghouse for PM control, known as DC12, exhausted inside the building, capacity 10 tons of iron per hour.

The proposed Minor Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). The source may begin operation upon issuance of the source modification approval.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
MLK/MES
cc: File - Fulton County
U.S. EPA, Region V
Fulton County Health Department
Air Compliance Section Inspector - Doug Elliott
Compliance Data Section - Jerri Curless
Administrative and Development - Janet Mobley
Technical Support and Modeling - Nancy Landau

PART 70 MINOR SOURCE MODIFICATION
OFFICE OF AIR MANAGEMENT

Rochester Metal Products Corporation
616 Indiana Avenue
Rochester, Indiana 46975

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 049-10821-00002	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

TABLE OF CONTENTS

Certification

Quarterly Report

Malfunction Report

SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates stationary gray iron foundry.

Responsible Official:	Don Christenson
Source Address:	616 Indiana Avenue, Rochester, Indiana 46975
Mailing Address:	616 Indiana Avenue, Rochester, Indiana 46975
Phone Number:	219 - 223 - 3164
SIC Code:	3321
County Location:	Fulton
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major under PSD Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to operate the following emission units and pollution control devices:

(a) Two (2) natural gas-fired preheaters/charge handling, known as 118, rated at a total of 21.5 million British thermal units per hour, equipped with a baghouse dust collector, known as DC9, preheaters installed in 1996 and prior 1974 and charge handling installed prior to 1974, exhausted through Stack SC-DC9, capacity: 34 tons of metal per hour total.

(b) Three (3) Hunter electric induction furnaces, known as 131, 132, and 133, modified in 1998, equipped with a baghouse dust collector, known as DC13, exhausted through Stack SC-DC13, capacity: 13 tons of metal per hour total.

(c) One (1) magnesium treatment operation, equipped with a baghouse for PM control, known as DC 10, exhausted through Stack SC-DC10, capacity:24 tons of iron per hour.

(d) One (1) Disa sand handling system, equipped with a baghouse for PM control, known as DC11, exhausted through Stack SC-DC11, capacity: 60 tons of sand per hour.

(e) One (1) Disa casting shakeout operation, equipped with a baghouse for PM control, known as DC11, exhausted through Stack SC-DC11, capacity 10 tons of iron per hour.

(f) One (1) Disa pouring/mold cooling operation, capacity: 10 tons of iron per hour.

(g) One (1) Disa casting/cooling operation, equipped with a baghouse for PM control, known as DC12, exhausted inside the building, capacity: 10 tons of iron per hour.

(h) One (1) Disa shot blast operation, equipped with a baghouse for PM control, known as DC12, exhausted inside the building, capacity 10 tons of iron per hour.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Permit No Defense [IC 13]

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

(a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this approval, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.

(b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this approval:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

C.9 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this approval until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.10 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.11 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this approval;

(3) The Compliance Monitoring Requirements in Section D of this approval;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this approval. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this approval by the Permittee and maintained on site, and is comprised of:

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the approval unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.12 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.13 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.14 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

(a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.15 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this approval;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this approval, and whether a deviation from a approval condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.16 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due.

(c) Unless otherwise specified in this approval, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(a) Two (2) natural gas-fired preheaters/charge handling, known as 118, rated at a total of 21.5 million British thermal units per hour, equipped with a baghouse dust collector, known as DC9, preheaters installed in 1996 and prior 1974 and charge handling installed prior to 1974, exhausted through Stack SC-DC9, capacity: 34 tons of metal per hour total.

(b) Three (3) Hunter electric induction furnaces, known as 131, 132, and 133, modified in 1998, equipped with a baghouse dust collector, known as DC13, exhausted through Stack SC-DC13, capacity: 13 tons of metal per hour total.

(c) One (1) magnesium treatment operation, equipped with a baghouse for PM control, known as DC 10, exhausted through Stack SC-DC10, capacity:24 tons of iron per hour.

(d) One (1) Disa sand handling system, equipped with a baghouse for PM control, known as DC11, exhausted through Stack SC-DC11, capacity: 60 tons of sand per hour.

(e) One (1) Disa casting shakeout operation, equipped with a baghouse for PM control, known as DC11, exhausted through Stack SC-DC11, capacity 10 tons of iron per hour.

(f) One (1) Disa pouring/mold cooling operation, capacity: 10 tons of iron per hour.

(g) One (1) Disa casting/cooling operation, equipped with a baghouse for PM control, known as DC12, exhausted inside the building, capacity: 10 tons of iron per hour.

(h) One (1) Disa shot blast operation, equipped with a baghouse for PM control, known as DC12, exhausted inside the building, capacity 10 tons of iron per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Prevention of Significant Deterioration [326 IAC 2-2]

In order to avoid the applicability of 326 IAC 2-2 (Prevention of Significant Deterioration):

(a) The amount of metal melted in the three (3) Hunter electric induction furnaces shall not exceed a total of 5,833 tons per month.

(b) The requirement from CP 049-8548, issued October 17, 1997, Condition No. 11(a) that established the amount of metal melted shall not exceed 5,153.8 tons per month has been increased as part of this modification.

(c) The PM emissions from the three (3) Hunter electric induction furnaces, exhausted through Stack SC-DC13, shall not exceed a total of 0.788 pounds per hour.

(d) The PM_{10} emissions from the three (3) Hunter electric induction furnaces, exhausted through Stack SC-DC13, shall not exceed a total of 0.788 pounds per hour.

(e) The requirement from CP 049-8548, issued October 17, 1997, Condition No. 11(a) established that the baghouse DC-13 shall operate at all times that the melting process is in operation and that the PM emissions from the melting process shall not exceed 1.43 pounds per hour and that the PM_{10} emissions from the melting process shall not exceed 1.43 pounds per hour has been replaced by the 0.788 pounds per hour limit to avoid PSD

applicability.

(f) The stack tests required pursuant to CP 049-8548-00002, issued on October 17, 1997 and CP 049-9997-00002, issued March 4, 1999, shall verify that the PM and PM_{10} emission factors for pouring and mold cooling do not exceed 0.400 pounds per ton of metal for PM and 0.090 pounds per ton of metal for $PM_{10.}$

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The stack tests required pursuant to CP 049-8548-00002, issued on October 17, 1997 and CP 049-9997-00002, issued March 4, 1999, shall verify that the PM and PM_{10} emission factors for pouring and mold cooling do not exceed 0.400 pounds per ton of metal for PM and 0.090 pounds per ton of metal for $PM_{10.}$

The Permittee is not required to perform additional testing of these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if these facilities is in compliance. If testing is required by IDEM, compliance with the PM and PM_{10} limits specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.4 Particulate Matter (PM)

The baghouses (DC9 - DC13) for PM control shall be in operation at all times when the two (2) preheaters/charge handling operations, three (3) Hunter election induction furnaces, the magnesium treatment, the Disa sand handing, the Disa casting/shakeout and the Disa shoot blast are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.5 Visible Emissions Notations

(a) Daily visible emission notations of the stack exhausts SC-DC9 through SC-DC11 and SC-DC13 shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses (DC9 - DC13) used in conjunction with the foundry processes, at least once daily when any of the processes are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 3.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.1.7 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the foundry operations when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.1.8 Broken or Failed Bag Detection

In the event that bag failure has been observed.

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.5, the Permittee shall maintain records of daily visible emission notations of the stack exhausts.

(b) To document compliance with Condition D.1.6, the Permittee shall maintain the following:

(1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:

(A) Inlet and outlet differential static pressure; and

(B) Cleaning cycle: frequency and differential pressure

(2) Documentation of all response steps implemented, per event .

(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

(4) Quality Assurance/Quality Control (QA/QC) procedures.

(5) Operator standard operating procedures (SOP).

(6) Manufacturer's specifications or its equivalent.

(7) Equipment "troubleshooting" contingency plan.

(8) Documentation of the dates vents are redirected.

(b) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7 and the dates the vents are redirected.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1(a) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Rochester Metal Products Corporation
Source Address: 616 Indiana Avenue, Rochester, Indiana 46975
Mailing Address: 616 Indiana Avenue, Rochester, Indiana 46975
Source Modification No.: 049-10821-00002

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

Part 70 Source Modification Quarterly Report

Source Name: Rochester Metal Products Corporation
Source Address: 616 Indiana Avenue, Rochester, Indiana 46975
Mailing Address: 616 Indiana Avenue, Rochester, Indiana 46975
Source Modification No.: 049-10821-00002
Facility: Three (3) Hunter Electric Induction Furnaces, known as 131, 132, and 133,
Parameter: Tons of Metal Melted
Limit: 5,833 tons of Metal Melted Per Month, Total

YEAR: _____

Month	Furnace 131	Furnace 132	Furnace 133	Total
	tons	tons	tons	tons

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES ?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100 TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: Rochester Metal Products Corporation PHONE NO. : 219 - 223 - 3164
LOCATION: (CITY AND COUNTY) Rochester / Fulton
PERMIT NO. 049-4112 AFS PLANT ID: 049-00002 AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 19_____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 19____ _____ AM / PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____
INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

*** Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____

_____

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for a Source Modification to a Part 70 Operating Permit

Source Background and Description

Source Name:	**Rochester Metal Products Corporation**
Source Location:	**616 Indiana Avenue, Rochester, Indiana 46975**
County:	**Fulton**
SIC Code:	**3321**
Operation Permit No.:	**CP 049-4112-00002**
Operation Permit Issuance Date:	**July 3, 1995**
Source Modification No.:	**049-10821-00002**
Permit Reviewer:	**Mark L. Kramer**

The Office of Air Management (OAM) has reviewed a modification application from Rochester Metal Products Corporation relating to the change in emission factors, control efficiencies and increased production limits for an existing permitted gray and ductile iron foundry. The modification consists of changes in emission factors and efficiencies of the control devices as well as an increase in the production limit. The following equipment is involved in this modification:

(a) Two (2) natural gas-fired preheaters/charge handling, known as 118, rated at a total of 21.5 million British thermal units per hour, equipped with a baghouse dust collector, known as DC9, preheaters installed in 1996 and prior 1974 and charge handling installed prior to 1974, exhausted through Stack SC-DC9, capacity: 34 tons of metal per hour total.

(b) Three (3) Hunter electric induction furnaces, known as 131, 132, and 133, modified in 1998, equipped with a baghouse dust collector, known as DC13, exhausted through Stack SC-DC13, capacity: 13 tons of metal per hour total.

(c) One (1) magnesium treatment operation, equipped with a baghouse for PM control, known as DC 10, exhausted through Stack SC-DC10, capacity:24 tons of iron per hour.

(d) One (1) Disa 2 sand handling system, equipped with a baghouse for PM control, known as DC11, exhausted through Stack SC-DC11, capacity: 60 tons of sand per hour.

(e) One (1) Disa 2 casting shakeout operation, equipped with a baghouse for PM control, known as DC11, exhausted through Stack SC-DC11, capacity 10 tons of iron per hour.

(f) One (1) Disa 2 pouring/mold cooling operation, capacity: 10 tons of iron per hour.

(g) One (1) Disa 2 casting/cooling operation, equipped with a baghouse for PM control, known as DC12, exhausted inside the building, capacity: 10 tons of iron per hour.

(h) One (1) Disa 2 shot blast operation, equipped with a baghouse for PM control, known as DC12, exhausted inside the building, capacity 10 tons of iron per hour.

History

On March 30, 1999 supplemented with information on September 21, 1999, Rochester Metal Products Corporation submitted an application to the OAM requesting to change the emission factors for pouring/mold cooling from 0.0472 to 0.4 pounds of PM per tons of metal poured and from 0.0472 to 0.09 pounds of PM_{10} per tons of metal poured. In addition, the limit on the amount of metal melted in CP 049-8548 has been increased from 5,153.8 tons per month, equivalent to 61,846 tons per year to 70,000 tons per year. The 5,153.8 tons per month production limit in the CP 049-8548 modification resulted in increases in PM and PM_{10} emissions of 15.2 and 14.4 tons per year which are less than the PSD significant levels of 25 and 15 tons per year for PM and PM_{10}, respectively. Similarly, CP 049-9997 the changes in emission factors and control efficiencies still maintain the PM and PM_{10} increase below the 25 and 15 tons per year threshold, respectively to avoid the applicability of 326 IAC 2-2. The source has not requested corresponding relaxation of the pouring/cooling limit in CP 049-8548 since the metal melted is sent to another line not effected by these changes. In addition, control efficiencies on the various processes have been changed as shown in the following table:

Process	Existing Control Efficiencies (%)		Proposed Control Efficiencies (%)	
	PM	PM_{10}	PM	PM_{10}
Preheaters	91.10	85.20	96.79	94.65
3 Electric Induction Furnaces	84.10	83.30	89.04	88.53
DISA Sand System	99.10	96.10	99.68	97.88
DISA Casting/Shakeout	99.10	96.10	96.20	94.58

All emission calculations have been presented with the existing emission factors, efficiencies and limits as well as the proposed changes for comparison purposes to determine compliance with 326 IAC 2-2 for the previous permits as well as for this modification.

On April 16, 1999, Rochester Metal Products requested a ninety (90) day extension for stack testing of the pouring/mold cooling operation required by CP 049-8548-00002, issued on October 17, 1997 in a letter to OAM - Compliance Data Section. Stack testing was completed on October 1, 1999.

Existing Approvals

The source applied for a Part 70 Operating Permit T 049-5999-00002 on May 31, 1996. The source has been operating under previous approvals including, but not limited to the following:

(a) CP 049-4112, issued on July 3, 1995,

(b) Administrative Amendment 049-6464, issued August 28, 1996,

(c) Administrative Amendment 049-9555, issued April 29, 1998,

(d) CP 049-8548, issued on October 17, 1997,

(e) CP 049-9997, issued on March 4, 1999,

(f) Administrative Amendment 049-11283, to be issued in 1999, and

(g) Administrative Amendment 049-11331, to be issued in 1999.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

None of the existing stacks and/or stack parameters are affected by any the proposed changes.

Recommendation

The staff recommends to the Commissioner that the Minor Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on March 30, 1999. Additional information was received on April 27, May 7, July 28, September 21 and October 6, 1999.

Emission Calculations

See pages 1 through 23 of 23 of Appendix A of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Because no new equipment has been proposed for the source, the increase in potential emissions before controls has been summarized due to the proposed changes in limits, emission factors and control efficiencies as shown on page 23 of 23 of Appendix A. The potential to emit values in the following table are the net increase in PM and PM_{10} due to the changes in emission factors, control efficiencies and production limits.

Pollutant	**Potential To Emit** (tons/year)
PM	15.5
PM_{10}	1.80
SO_2	0.00
VOC	0.00
CO	0.00
NO_X	0.00

Note: For the purpose of determining Title V applicability for particulates, PM_{10}, not PM, is the regulated pollutant in consideration.

Changes in HAPS due to the proposed changes are negligible.

(a) The entire source potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM_{10} is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) Fugitive Emissions

Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive particulate matter (PM) emissions are counted toward determination of PSD applicability.

(c) This modification to a yet to be issued Part 70 permit is a minor source modification because the net increases in the potential to emit before controls are less than twenty five (25) tons per year.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1996 OAM emission data.

Pollutant	**Actual Emissions** (tons/year)
PM	25.3
PM_{10}	25.3
SO_2	0.170
VOC	23.9
CO	0.00
NO_X	0.377
HAP	Not submitted

Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	**PM** (tons/yr)	**PM_{10}** (tons/yr)	**SO_2** (tons/yr)	**VOC** (tons/yr)	**CO** (tons/yr)	**NO_X** (tons/yr)
Proposed Modification	3.70	-5.50	0.00	0.00	0.00	0.00
Contemporaneous Increases	0.00	0.00	0.00	0.00	0.00	0.00
Contemporaneous Decreases	0.00	0.00	0.00	0.00	0.00	0.00

Pollutant	PM (tons/yr)	PM_{10} (tons/yr)	SO_2 (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NO_x (tons/yr)
Net Emissions	3.70	-5.50	0.00	0.00	0.00	0.00
PSD Significant Level	25	15	40	40	100	40

The increase in PM emissions after controls is due to the changes in emission factors, control efficiencies and the relaxation in the production limit. Note that these changes have not caused the PSD Significant Levels to be exceeded in CP 049-8548 and CP 049-9997.

On October 6, 1999, the source provided the following annual average actual PM and PM_{10} emissions for the past two years (1997 and 1998) for the facilities covered under CP 049-8548, issued on October 17, 1997.

Facility/Process Description	1997 PM & PM_{10} Emissions (tons per year)	1998 PM & PM_{10} Emissions (tons per year)
Preheaters	1.26	0.46
Induction Furnaces/Melt	2.78	-
Sand System	1.34	-
Casting/shakeout	2.37	-
Pouring/Mold Cooling	0.33	-
Total	8.08	0.46
Two- Year Annual Average	4.27 tons per year	

Pages 5 - 8 of 23 of Appendix A calculates the potential PM and PM_{10} emissions after controls for the facilities covered by CP 049-8548, issued on October 17, 1997, accounting for the changes in emission factors and control efficiencies in addition to the increase in the melt limit from 61,846 to 70,000 tons per year. The following table contrasts these potential PM and PM_{10} emissions totaled on Page 8 and summarized on page 23 of 23 with the actual PM and PM_{10} annual average emissions of 4.27 tons per year.

	Potential Emissions After Controls (tons per year)	
	PM	PM_{10}
CP 049-8548 with Proposed Changes in Emission Factors, Control Efficiencies & Increased Melt Limit to 70,000 TPY	23.0	12.9
Annual Average Actual Emissions	4.27	4.27
Difference (Proposed - Annual Actual Averages)	18.7	8.63

Therefore, the differences are less than the PSD significant levels of 25 and 15 tons per year for PM and PM_{10}, respectively.

The following table compares the existing potential emissions after controls with those calculated with the proposed changes. These emissions have been abstracted from page 23 of 23 of Appendix A. These comparisons show the effect of the proposed changes on the potential emissions after controls for CP 049-8548, issued on October 17, 1997 and CP 049-9997, issued on March 4, 1999.

	Potential Emissions After Controls (tons per year)	
	PM	PM_{10}
Existing CP 049-8548 with Melt Limit of 61,846 TPY	15.2	14.4
CP 049-8548 with Proposed Changes in Emission Factors, Control Efficiencies & Increased Melt Limit to 70,000 TPY	23.0	12.9
Existing CP 049-9997	8.73	6.46
CP 049-9997 with Proposed Changes in Emission Factors and Control Efficiencies	8.53	3.81

As the above table shows, the existing potential PM and PM_{10} emissions after controls for the existing permit as well as the potential emissions calculated with the proposed changes are all less than the PSD significant levels of twenty-five (25) and fifteen (15) tons per year for PM and PM_{10}, respectively.

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

County Attainment Status

The source is located in Fulton County.

Pollutant	Status
PM_{10}	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) and oxides of nitrogen (NO_X) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Fulton County has been designated as attainment or unclassifiable

for ozone.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 (T-049-5999-00002) application on May 31, 1996. The changes in emission factors, control efficiencies and production limits being reviewed under this permit shall be incorporated in the submitted Part 70 application.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This modification to an existing major PSD source is not major since the potential emissions after the increased production limit, changes in emission factors and changes in control efficiencies do not exceed the PSD significant levels and therefore this rule is not applicable. Conditions 11(a) of CP 049-8548-00002 as well as the same conditions 10(a) of CP 049-9997-0002 have been relaxed in this proposed modification. Conditions 10(b) and 11(b) remain unchanged since the capacity of the scrap and charge handling has not had the capacity increased from ten (10) tons per hour used in CP 049-8548.

Therefore, Condition 11(a) which stated:

> That pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), the following conditions shall apply:
>
> > The amount of metal melted shall not exceed 5,153.8 tons per month. The baghouse DC-13 shall operate at all times that the melting process is in operation and the PM emissions from the melting process shall not exceed 1.43 pounds per hour. The PM_{10} emissions from the melting process shall not exceed 1.43 pounds per hour.

has been modified to reflect the new production limit as follows:

> In order to avoid the applicability of 326 IAC 2-2 (Prevention of Significant Deterioration),
>
> (a) The amount of metal melted in the three (3) Hunter electric induction furnaces shall not exceed a total of 5,833 tons per month.
>
> (b) The PM emissions from the three (3) Hunter electric induction furnaces, exhausted through Stack SC-DC13, shall not exceed a total of 0.788 pounds per hour.
>
> (c) The PM_{10} emissions from the three (3) Hunter electric induction furnaces, exhausted through Stack SC-DC13, shall not exceed a total of 0.788 pounds per

hour.

The hourly PM and PM_{10} emission rate of 0.788 pounds per hour is equivalent to 3.45 tons per year, from the three (3) electric induction furnaces with the proposed production limit and changes in control efficiencies of the control device as shown on page 19 of 23 of Appendix A.

The proposed changes in production limits, emission factors and control efficiencies show that the modifications in CP 049-8548 and CP 049-9997 result in PM and PM_{10} emissions shown on page 23 of 23 of Appendix A. The net effect of these changes on all equipment in CP 049-8548 result in PM and PM_{10} emissions after controls and production limits of 23.0 and 12.9 tons per year, respectively. The net effect of these changes on all equipment in CP 049-9997 result in PM and PM_{10} emissions after controls and limits of 8.53 and 3.81 tons per year, respectively. The PM and PM_{10} emissions after control and production limits are all less than the PSD significant levels of twenty-five (25) and fifteen (15) tons per year for an existing major source.

The change in emissions due to the modification proposed in this permit result in a change in PM and PM_{10} emissions also shown on page 23 of 23 of Appendix A. The change in PM and PM_{10} emissions from the existing source to the existing source evaluated with changed emission factors, control efficiencies and production limits is less than the PSD significant levels of twenty-five (25) and fifteen (15) tons per year for an existing major source. The magnitude of these changes on PM and PM_{10} emissions after controls and limits is 3.70 and -5.50 tons per year, respectively. Thus 326 IAC 2-2 is not applicable to the three (3) permits.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because the source emits potentially more than one hundred (100) tons per year of PM_{10}. Pursuant to this rule, the owner/ operator of this facility must annually submit an emission statement of the facility. The annual statement must be received by July 1 of each year and must contain the minimum requirements as specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-3-2 (Particulate Emission Limitations)

Since none of the processes in this modification have had a change in their hourly process weight rates compared to those permitted in CP 049-8548 and CP 049-9997, the existing allowable PM emission rates have not changed. However, as noted above the allowable PM and PM_{10} emission rates from the three (3) electric induction furnaces exhausted through Stack SC-DC13, has changed from 1.43 to 0.906 pounds per hour to comply with 326 IAC 2-2 and therefore, still satisfies 326 IAC 6-3-2.

Compliance Requirements

The following two paragraphs should be included in every Part 70 TSD.

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The preheaters/charge handling, the magnesium treatment, the Disa sand handling, the Disa casting/shakeout, Disa casting/ cooling, the Disa shot blast and the Hunter three (3) electric induction furnaces have applicable compliance monitoring conditions as specified below:

   (a) Daily visible emissions notations of the preheaters/charge handling, the magnesium treatment, the Disa sand handling, the Disa casting/shakeout, Disa casting/ cooling, the Disa shot blast and the Hunter three (3) electric induction furnaces stack exhausts Stacks DC9 through DC13 shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

   (b) The Permittee shall take readings of the total static pressure drop across the baghouses, at least once daily. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across baghouses known as DC9 through DC13 shall be maintained within the range of 3 and 6 inches of water. The Compliance Response Plan for these baghouses shall contain troubleshooting contingency and response steps for when the pressure reading is outside of this range for any one reading.

   These monitoring conditions are necessary because the baghouses must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations), 326 IAC 2-2 and 326 IAC 2-7 (Part 70).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPS) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.

Conclusion

The operation of this gray iron foundry shall be subject to the conditions of the attached proposed Source Modification Permit No. 049-10821-00002.

Appendix A: Emission Calculations
Grey Iron Foundry

Company Name: Rochester Metal Products Corporation
Address City IN Zip: 616 Indiana Avenue, Rochester, IN 46975
Source Modification: 049-10821
Plt ID: 049-00002
Reviewer: Mark Kramer
Date: March 30, 1999

Existing PM and PM-10 Emissions Based on CP 049-8548
If production is limited to 61,846 tons/yr, equivalent to 6185 hours per year at 10 tons/hr

Iron Process	Throughput tons/hr		
Preheaters	10.00	PM Control	91.10%
		PM-10 Control	85.20%

	PM	PM10	Allowable PM 326 IAC 6-3-2
Emission Factors lbs/ton produced	0.6	0.36	
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	6.00	3.60	19.2
Potential Emissions lbs/day	144.0	86.4	
Potential Emissions tons/yr	26.28	15.77	
Potential Emissions after Controls tons/yr	2.34	2.33	
Controlled & Limited to 61,846 tons/yr	1.65	1.65	

AP-42 Factors

Iron Process	Throughput tons/hr		
3 Electric Induction Melting Furnaces (131-133)	10.00	PM Control	84.10%
		PM-10	83.30%

	PM	PM10	Allowable PM 326 IAC 6-3-2
Emission Factors lbs/ton produced	0.9	0.86	
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	9.00	8.60	19.2
Potential Emissions tons/yr	39.4	37.7	
Potential Emissions after Controls tons/yr	6.27	6.29	
Controlled & Limited to 61,846 tons/yr	4.43	4.44	

AP-42 Factors

Iron Process	Throughput tons/hr	PM & PM-10 Control
Magnesium Treatment	24.0	99.9%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	1.8	1.8	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	43.200	43.200	34.5
Potential Emissions tons/yr	189.216	189.216	
Potential Emissions after Controls tons/yr	0.189	0.189	

AP-42 Factor

Iron Process	Throughput tons/hr	PM Control	99.10%
DISA Sand System	60.00	PM-10	96.10%

	PM	PM10	Allowable PM
Emission Factors lbs/ton handled	3.6	0.54	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	216.00	32.40	46.3
Potential Emissions tons/yr	946.1	141.9	
Potential Emissions after Controls tons/yr	8.515	5.535	
Controlled & Limited to 61,846 tons/yr	6.01	3.91	

AIRS

Iron Process	Throughput tons/hr	PM Control	99.10%
DISA Casting Shakeout	10.00	PM-10	96.10%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	3.2	2.24	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	32.0	22.40	19.2
Potential Emissions tons/yr	140.2	98.1	
Potential Emissions after Controls tons/yr	1.261	3.826	
Controlled & Limited to 61,846 tons/yr	0.891	2.70	

Iron Process	Throughput tons/hr	PM Control	0.00%
DISA Pouring/Cooling	10.00	PM-10	0.00%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	0.0472	0.0472	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	0.5	0.47	19.2
Potential Emissions tons/yr	2.07	2.07	
Potential Emissions after Controls tons/yr	2.07	2.07	
Controlled & Limited to 61,846 tons/yr	1.46	1.46	

Iron Process	Throughput tons/hr	PM Control	99.9%
DISA Casting/Cooling	10.00	PM-10	99.9%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	1.4	1.4	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	14.0	14.00	19.2
Potential Emissions tons/yr	61.3	61.3	
Potential Emissions after Controls tons/yr	0.061	0.061	
Controlled & Limited to 61,846 tons/yr	0.043	0.043	

Iron Process	Throughput tons/hr	PM Control	99.9%
DISA Shot Blast	10.00	PM-10	99.9%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	17	1.7	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	170.0	17.00	19.2
Potential Emissions tons/yr	744.6	74.5	
Potential Emissions after Controls tons/yr	0.745	0.074	
Controlled & Limited to 61,846 tons/yr	0.526	0.053	

SUMMARY OF EMISSIONS

Process Description	Before/After Control	PM (tpy)	PM10 (tpy)
Iron	Before	26.3	15.8
Preheaters	After & Limit	1.65	1.65
Iron	Before	39.4	37.7
3 Electric Induction Melting Furnaces (131-133)	After & Limit	4.43	4.44
Iron	Before	189.216	189.216
Magnesium Treatment	After	0.189	0.189
Iron	Before	946.1	141.9
DISA Sand System	After & Limit	6.012	3.908
Iron	Before	140	98.1
DISA Casting Shakeout	After & Limit	0.891	2.70
Iron	Before	2.07	2.07
DISA Pouring/Cooling	After & Limit	1.46	1.46
Iron	Before	61.3	61.3
DISA Casting/Cooling	After & Limit	0.043	0.043
Iron	Before	745	74.5
DISA Shot Blast	After & Limit	0.526	0.053
TOTALS	**Before**	**2149**	**621**
Controlled & Limited to 61,846 tons/yr	**After & Limit**	**15.2**	**14.4**

Appendix A: Emission Calculations
Grey Iron Foundry

Company Name: Rochester Metal Products Corporation
Address City IN Zip: 616 Indiana Avenue, Rochester, IN 46975
Source Modification: 049-10821
Plt ID: 049-00002
Reviewer: Mark Kramer
Date: March 30, 1999

The Effect of the Proposed Changes (increase melt limit, emission factors & control efficiencies) on PM and PM-10 Emissions in CP 049-8548

Preheaters & induct. furnaces are limited to 70,000 tons/yr, equivalent to **5385** hours per year at 13 tons/hr

Pursuant to CP 049-8548 Condition No.11, limited to 5153.8 tons of melted metal/month or 61,846 tons/yr or at 10 tons/hr
6185 hours per year

Iron Process	Throughput tons/hr		
Preheaters	10.00	PM Control	96.79%
		PM-10 Control	94.65%

	PM	PM10	Allowable PM 326 IAC 6-3-2
Emission Factors lbs/ton produced	0.6	0.36	
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	6.00	3.60	19.2
Potential Emissions lbs/day	144.0	86.4	
Potential Emissions tons/yr	26.28	15.77	
Potential Emissions after Controls tons/yr	0.844	0.844	
Controlled & Limited to 70,000 tons/yr	0.519	0.519	

AP-42 Factors

Iron Process	Throughput tons/hr		
3 Electric Induction Melting Furnaces (131-133)	13.00	PM Control	89.04%
		PM-10	88.53%

	PM	PM10	Allowable PM 326 IAC 6-3-2
Emission Factors lbs/ton produced	0.9	0.86	
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	11.70	11.18	22.9
Potential Emissions tons/yr	51.2	49.0	
Potential Emissions after Controls tons/yr	5.62	5.62	
Controlled & Limited to 70,000 tons/yr	3.45	3.45	

AP-42 Factors

Iron Process	Throughput tons/hr	PM & PM-10 Control
Magnesium Treatment	24.0	99.9%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	1.8	1.8	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	43.200	43.200	34.5
Potential Emissions tons/yr	189.216	189.216	
Potential Emissions after Controls tons/yr	0.189	0.189	

AP-42 Factor

Iron Process	Throughput tons/hr		
DISA Sand System	60.00	PM Control	99.68%
		PM-10	97.88%

	PM	PM10	Allowable PM
Emission Factors lbs/ton handled	3.6	0.54	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	216.00	32.40	46.3
Potential Emissions tons/yr	946.1	141.9	
Potential Emissions after Controls tons/yr	3.027	3.009	
Controlled & Limited to 61,846 tons/yr	2.14	2.12	

AIRS

Iron Process	Throughput tons/hr		
DISA Casting Shakeout	10.00	PM Control	96.20%
		PM-10	94.58%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	3.2	2.24	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	32.0	22.40	19.2
Potential Emissions tons/yr	140.2	98.1	
Potential Emissions after Controls tons/yr	5.326	5.318	
Controlled & Limited to 61,846 tons/yr	3.760	3.75	

Iron Process	Throughput tons/hr	PM Control	0.00%
DISA Pouring/Cooling	10.00	PM-10	0.00%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	0.4	0.09	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	4.0	0.90	19.2
Potential Emissions tons/yr	17.52	3.94	
Potential Emissions after Controls tons/yr	17.52	3.94	
Controlled & Limited to 61,846 tons/yr	12.37	2.78	

Iron Process	Throughput tons/hr	PM Control	99.9%
DISA Casting/Cooling	10.00	PM-10	99.9%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	1.4	1.4	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	14.0	14.00	19.2
Potential Emissions tons/yr	61.3	61.3	
Potential Emissions after Controls tons/yr	0.061	0.061	
Controlled & Limited to 61,846 tons/yr	0.043	0.043	

Iron Process	Throughput tons/hr	PM Control	99.9%
DISA Shot Blast	10.00	PM-10	99.9%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	17	1.7	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	170.0	17.00	19.2
Potential Emissions tons/yr	744.6	74.5	
Potential Emissions after Controls tons/yr	0.745	0.074	
Controlled & Limited to 61,846 tons/yr	0.526	0.053	

SUMMARY OF EMISSIONS

Process Description	Before/After Control	PM (tpy)	PM10 (tpy)
Iron	Before	26.3	15.8
Preheaters	After & Limit	0.52	0.52
Iron	Before	51.2	49.0
3 Electric Induction Melting Furnaces (131-13	After & Limit	3.45	3.45
Iron	Before	189.216	189.216
Magnesium Treatment	After	0.189	0.189
Iron	Before	946.1	141.9
DISA Sand System	After & Limit	2.137	2.124
Iron	Before	140	98.1
DISA Casting Shakeout	After & Limit	3.760	3.75
Iron	Before	17.52	3.94
DISA Pouring/Cooling	After & Limit	12.37	2.78
Iron	Before	61.3	61.3
DISA Casting/Cooling	After & Limit	0.043	0.043
Iron	Before	745	74.5
DISA Shot Blast	After & Limit	0.526	0.053
TOTALS	**Before**	**2176**	**634**
Controlled & Limited	**After & Limit**	**23.0**	**12.9**

Appendix A: Emission Calculations
Grey Iron Foundry

Company Name: Rochester Metal Products Corporation
Address City IN Zip: 616 Indiana Avenue, Rochester, IN 46975
Source Modification 049-10821
Plt ID: 049-00002
Reviewer: Mark Kramer
Date: March 30, 1999

Existing PM and PM-10 Emissions Based on CP 049-9997
Throughputs are increases from production of 61,846 to 80,405 tons per year
Process weights are totals for the facilities

Iron Process	Throughput tons/hr	Total Process Weight tons/hr		
Charge Handling	3.00	34.0	PM Control	86.4%

SCC 3-04-003-15

	PM	PM10	Allowable PM 326 IAC 6-3-2
Emission Factors lbs/ton produced	0.6	0.36	
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	1.80	1.08	41.1
Potential Emissions lbs/day	43.2	25.9	
Potential Emissions tons/yr	7.88	4.73	
Potential Emissions after Controls tons/yr	1.07	0.643	

Iron Process	Throughput tons/hr	Total Process Weight tons/hr	PM Control	88.5%
3 Electric Induction Melting Furnaces	3.00	13.0		

SCC 3-04-003-03

	PM	PM10	Allowable PM 326 IAC 6-3-2
Emission Factors lbs/ton produced	0.9	0.86	
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	2.70	2.58	22.9
Potential Emissions tons/yr	11.8	11.3	
Potential Emissions after Controls tons/yr	1.36	1.30	

Iron Process	Throughput tons/hr	Total Process Weight tons/hr	PM Control	
Pouring & Cooling	3.0	10.3		0.0%

SCC 3-04-003-18

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	0.0473	0.0473	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	0.142	0.142	19.6
Potential Emissions tons/yr	0.622	0.622	
Potential Emissions after Controls tons/yr	0.622	0.622	

PM and PM-10 are stack test emission factors

Iron Process	Throughput tons/hr	Total Process Weight tons/hr	PM Control	
Shakeout & Casting/Cooling Operations	3.00	10.3		86.8%

SCC-3-04-003-31

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	3.2	2.24	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	9.60	6.72	19.6
Potential Emissions tons/yr	42.0	29.4	
Potential Emissions after Controls tons/yr	5.550	3.885	

Iron Process	Throughput tons/hr	Total Process Weight tons/hr	PM Control	
Grinding and Cleaning	1.74	8.34		99.9%

SCC 3-04-003-40

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	17	1.7	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	29.6	2.96	17.0
Potential Emissions tons/yr	129.6	13.0	
Potential Emissions after Controls tons/yr	0.130	0.013	

Iron Process	Throughput tons/hr	VOC Control
VOC From Cores	3.0	0.0%

	VOC
Emission Factors lbs/ton produced	0.504
Percentage of Emissions	100.00%
Potential Emissions lbs/hr	1.512
Potential Emissions tons/yr	6.62
Potential Emissions after Controls tons/yr	6.62

SUMMARY OF EMISSIONS

Process Description	Before/After Control	PM (tpy)	PM10 (tpy)	VOC (tpy)
Iron Charge Handling	Before	7.88	4.73	
	After	1.07	0.64	
Iron 3 Electric Induction Melting Furnaces	Before	11.83	11.30	
	After	1.36	1.30	
Iron Pouring & Cooling	Before	0.622	0.622	
	After	0.622	0.622	
Iron Shakeout & Casting/Cooling Operations	Before	42.0	29.4	
	After	5.550	3.885	
Iron Grinding and Cleaning	Before	130	13.0	
	After	0.13	0.013	
Iron VOC From Cores	Before			6.62
	After			6.62
TOTALS	**Before**	**192**	**59.0**	**6.62**
	After	**8.73**	**6.46**	**6.62**

Appendix A: Emission Calculations
Grey Iron Foundry

Company Name: Rochester Metal Products Corporation
Address City IN Zip: 616 Indiana Avenue, Rochester, IN 46975
Source Modification 049-10821
Plt ID: 049-00002
Reviewer: Mark Kramer
Date: March 30, 1999

The Effect of the Proposed Changes on the PM and PM-10 Emissions in CP 049-9997

Iron Process	Throughput tons/hr	Total Process Weight tons/hr		
Charge Handling/Preheaters	3.00	34.0	PM Control	96.79%
SCC 3-04-003-15			PM-10Control	94.65%

	PM	PM10	Allowable PM 326 IAC 6-3-2
Emission Factors lbs/ton produced	0.6	0.36	
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	1.80	1.08	41.1
Potential Emissions lbs/day	43.2	25.9	
Potential Emissions tons/yr	7.88	4.73	
Potential Emissions after Controls tons/yr	0.253	0.253	

Iron Process	Throughput tons/hr	Total Process Weight tons/hr		
3 Electric Induction Melting Furnaces	3.00	13.0	PM Control	89.04%
			PM Control	88.53%

SCC 3-04-003-03	PM	PM10	Allowable PM 326 IAC 6-3-2
Emission Factors lbs/ton produced	0.9	0.86	
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	2.70	2.58	22.9
Potential Emissions tons/yr	11.8	11.3	
Potential Emissions after Controls tons/yr	1.30	1.24	

Iron Process	Throughput tons/hr	Total Process Weight tons/hr		
Pouring & Cooling	3.0	10.3	PM Control	0.0%

SCC 3-04-003-18

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	0.40	0.09	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	1.200	0.270	19.6
Potential Emissions tons/yr	5.256	1.183	
Potential Emissions after Controls tons/yr	5.256	1.183	

Iron Process	Throughput tons/hr	Total Process Weight tons/hr		
Shakeout & Casting/Cooling Operations	3.00	10.3	PM Control PM Control	96.2% 94.6%

SCC-3-04-003-31

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	3.2	2.24	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	9.60	6.72	19.6
Potential Emissions tons/yr	42.0	29.4	
Potential Emissions after Controls tons/yr	1.598	1.118	

Iron Process	Throughput tons/hr	Total Process Weight tons/hr		
Grinding and Cleaning	1.74	8.34	PM Control	99.9%

SCC 3-04-003-40

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	17	1.7	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	29.6	2.96	17.0
Potential Emissions tons/yr	129.6	13.0	
Potential Emissions after Controls tons/yr	0.130	0.013	

Iron Process	Throughput tons/hr	VOC Control
VOC From Cores	3.0	0.0%

	VOC
Emission Factors lbs/ton produced	0.504
Percentage of Emissions	100.00%
Potential Emissions lbs/hr	1.512
Potential Emissions tons/yr	6.62
Potential Emissions after Controls tons/yr	6.62

SUMMARY OF EMISSIONS

Process Description	Before/After Control	PM (tpy)	PM10 (tpy)	VOC (tpy)
Iron Charge Handling/Preheaters	Before	7.88	4.73	
	After	0.25	0.25	
Iron 3 Electric Induction Melting Furnaces	Before	11.83	11.30	
	After	1.30	1.24	
Iron Pouring & Cooling	Before	5.256	1.183	
	After	5.256	1.183	
Iron Shakeout & Casting/Cooling Operations	Before	42.0	29.4	
	After	1.598	1.118	
Iron Grinding and Cleaning	Before	130	13.0	
	After	0.13	0.013	
Iron VOC From Cores	Before			6.62
	After			6.62
TOTALS	**Before**	**197**	**59.6**	**6.62**
	After	**8.53**	**3.81**	**6.62**

Appendix A: Emission Calculations
Grey Iron Foundry

Company Name: Rochester Metal Products Corporation
Address City IN Zip: 616 Indiana Avenue, Rochester, IN 46975
Source Modification: 049-10821
Plt ID: 049-00002
Reviewer: Mark Kramer
Date: March 30, 1999

Existing PM and PM-10 Emissions Based on EUs
at Full Capacity With Existing Limits s limited to 61,846 tons/yr, equivalent to 6185 hours per year at 10 tons/hr

Iron Process	Throughput tons/hr		
Preheaters	34.00	PM Control	91.10%
		PM-10 Control	85.20%

	PM	PM10	Allowable PM 326 IAC 6-3-2
Emission Factors lbs/ton produced	0.6	0.36	
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	20.40	12.24	43.5
Potential Emissions lbs/day	489.6	293.8	
Potential Emissions tons/yr	89.35	53.61	
Potential Emissions after Controls tons/yr	7.95	7.93	
Controlled & Limited to 61,846 tons/yr	5.61	5.60	

AP-42 Factors

Iron Process	Throughput tons/hr		
3 Electric Induction Melting Furnaces (131-133)	13.00	PM Control	84.10%
		PM-10	83.30%

	PM	PM10	Allowable PM 326 IAC 6-3-2
Emission Factors lbs/ton produced	0.9	0.86	
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	11.70	11.18	22.9
Potential Emissions tons/yr	51.2	49.0	
Potential Emissions after Controls tons/yr	8.15	8.18	
Controlled & Limited to 61,846 tons/yr	5.75	5.77	

AP-42 Factors

Iron Process	Throughput tons/hr	PM & PM-10 Control
Magnesium Treatment	24.0	99.9%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	1.8	1.8	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	43.200	43.200	34.5
Potential Emissions tons/yr	189.216	189.216	
Potential Emissions after Controls tons/yr	0.189	0.189	

AP-42 Factor

Iron Process	Throughput tons/hr	PM Control	99.10%
DISA Sand System	60.00	PM-10	96.10%

	PM	PM10	Allowable PM
Emission Factors lbs/ton handled	3.6	0.54	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	216.00	32.40	46.3
Potential Emissions tons/yr	946.1	141.9	
Potential Emissions after Controls tons/yr	8.515	5.535	
Controlled & Limited to 61,846 tons/yr	6.01	3.91	

AIRS

Iron Process	Throughput tons/hr	PM Control	99.10%
DISA Casting Shakeout	10.00	PM-10	96.10%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	3.2	2.24	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	32.0	22.40	19.2
Potential Emissions tons/yr	140.2	98.1	
Potential Emissions after Controls tons/yr	1.261	3.826	
Controlled & Limited to 61,846 tons/yr	0.891	2.70	

Iron Process	Throughput tons/hr	PM Control	0.00%
DISA Pouring/Cooling	10.00	PM-10	0.00%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	0.0472	0.0472	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	0.5	0.47	19.2
Potential Emissions tons/yr	2.07	2.07	
Potential Emissions after Controls tons/yr	2.07	2.07	
Controlled & Limited to 61,846 tons/yr	1.46	1.46	

Iron Process	Throughput tons/hr	PM Control	99.9%
DISA Casting/Cooling	10.00	PM-10	99.9%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	1.4	1.4	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	14.0	14.00	19.2
Potential Emissions tons/yr	61.3	61.3	
Potential Emissions after Controls tons/yr	0.061	0.061	
Controlled & Limited to 61,846 tons/yr	0.043	0.043	

Iron Process	Throughput tons/hr	PM Control	99.9%
DISA Shot Blast	10.00	PM-10	99.9%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	17	1.7	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	170.0	17.00	19.2
Potential Emissions tons/yr	744.6	74.5	
Potential Emissions after Controls tons/yr	0.745	0.074	
Controlled & Limited to 61,846 tons/yr	0.526	0.053	

SUMMARY OF EMISSIONS

Process Description	Before/After Control	PM (tpy)	PM10 (tpy)
Iron	Before	89.4	53.6
Preheaters	After & Limit	5.61	5.60
Iron	Before	51.2	49.0
3 Electric Induction Melting Furnaces (131-13	After & Limit	5.75	5.77
Iron	Before	189.216	189.216
Magnesium Treatment	After	0.189	0.189
Iron	Before	946.1	141.9
DISA Sand System	After & Limit	6.012	3.908
Iron	Before	140	98.1
DISA Casting Shakeout	After & Limit	0.891	2.70
Iron	Before	2.07	2.07
DISA Pouring/Cooling	After & Limit	1.46	1.46
Iron	Before	61.3	61.3
DISA Casting/Cooling	After & Limit	0.043	0.043
Iron	Before	745	74.5
DISA Shot Blast	After & Limit	0.526	0.053
TOTALS	**Before**	**2224.0**	**669.7**
Controlled & Limited to 61,846 tons/yr	**After & Limit**	**20.5**	**19.7**

Appendix A: Emission Calculations
Grey Iron Foundry

Company Name: Rochester Metal Products Corporation
Address City IN Zip: 616 Indiana Avenue, Rochester, IN 46975
Source Modification: 049-10821
Plt ID: 049-00002
Reviewer: Mark Kramer
Date: March 30, 1999

The Effect of the Proposed Changes on PM and PM-10 Emissions on the EUs W/Increased Limits, Changes in Control Eff. & EFs

Limited Hrs 5385 Preheaters & Induct Furn (70000 TPY/13 TPH)

Limited Hrs 6185 **All Others** (61846 TPY/10 TPH)

Iron Process	Throughput tons/hr
Preheaters	34.00

PM Control 96.79%
PM-10 Control 94.65%

	PM	PM10	Allowable PM 326 IAC 6-3-2
Emission Factors lbs/ton produced	0.6	0.36	
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	20.40	12.24	43.5
Potential Emissions lbs/day	489.6	293.8	
Potential Emissions tons/yr	89.35	53.61	
Potential Emissions after Controls tons/yr	2.87	2.87	
Controlled & Limited to 70,000 tons/yr	1.76	1.76	

AP-42 Factors

Iron Process	Throughput tons/hr
3 Electric Induction Melting Furnaces (131-133)	13.00

PM Control 89.04%
PM-10 88.53%

	PM	PM10	Allowable PM 326 IAC 6-3-2
Emission Factors lbs/ton produced	0.9	0.86	
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	11.70	11.18	22.9
Potential Emissions tons/yr	51.2	49.0	
Potential Emissions after Controls tons/yr	5.62	5.62	
Controlled & Limited to 70,000 tons/yr	3.45	3.45	

AP-42 Factors

Iron Process	Throughput tons/hr	PM & PM-10 Control
Magnesium Treatment	24.0	99.9%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	1.8	1.8	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	43.200	43.200	34.5
Potential Emissions tons/yr	189.216	189.216	
Potential Emissions after Controls tons/yr	0.189	0.189	

AP-42 Factor

Iron Process	Throughput tons/hr	PM Control	99.68%
DISA Sand System	60.00	PM-10	97.88%

	PM	PM10	Allowable PM
Emission Factors lbs/ton handled	3.6	0.54	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	216.00	32.40	46.3
Potential Emissions tons/yr	946.1	141.9	
Potential Emissions after Controls tons/yr	3.027	3.009	
Controlled & Limited to 61,846 tons/yr	2.14	2.12	

AIRS

Iron Process	Throughput tons/hr	PM Control	96.20%
DISA Casting Shakeout	10.00	PM-10	94.58%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	3.2	2.24	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	32.0	22.40	19.2
Potential Emissions tons/yr	140.2	98.1	
Potential Emissions after Controls tons/yr	5.326	5.318	
Controlled & Limited to 61,846 tons/yr	3.760	3.75	

Iron Process	Throughput tons/hr	PM Control	0.00%
DISA Pouring/Cooling	10.00	PM-10	0.00%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	0.4	0.09	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	4.0	0.90	19.2
Potential Emissions tons/yr	17.52	3.94	
Potential Emissions after Controls tons/yr	17.52	3.94	
Controlled & Limited to 61,846 tons/yr	12.37	2.78	

Iron Process	Throughput tons/hr	PM Control	99.9%
DISA Casting/Cooling	10.00	PM-10	99.9%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	1.4	1.4	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	14.0	14.00	19.2
Potential Emissions tons/yr	61.3	61.3	
Potential Emissions after Controls tons/yr	0.061	0.061	
Controlled & Limited to 61,846 tons/yr	0.043	0.043	

Iron Process	Throughput tons/hr	PM Control	99.9%
DISA Shot Blast	10.00	PM-10	99.9%

	PM	PM10	Allowable PM
Emission Factors lbs/ton produced	17	1.7	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	170.0	17.00	19.2
Potential Emissions tons/yr	744.6	74.5	
Potential Emissions after Controls tons/yr	0.745	0.074	
Controlled & Limited to 61,846 tons/yr	0.526	0.053	

SUMMARY OF EMISSIONS

Process Description	Before/After Control	PM (tpy)	PM10 (tpy)
Iron	Before	89.4	53.6
Preheaters	After & Limit	1.76	1.76
Iron	Before	51.2	49.0
3 Electric Induction Melting Furnaces (131-133)	After & Limit	3.45	3.45
Iron	Before	189.216	189.216
Magnesium Treatment	After	0.189	0.189
Iron	Before	946.1	141.9
DISA Sand System	After & Limit	2.137	2.124
Iron	Before	140	98.1
DISA Casting Shakeout	After & Limit	3.760	3.75
Iron	Before	17.52	3.94
DISA Pouring/Cooling	After & Limit	12.37	2.78
Iron	Before	61.3	61.3
DISA Casting/Cooling	After & Limit	0.043	0.043
Iron	Before	745	74.5
DISA Shot Blast	After & Limit	0.526	0.053
TOTALS	**Before**	**2239.5**	**671.5**
Controlled & Limited	**After & Limit**	**24.2**	**14.2**

Company Name: Rochester Metal Products Corporation
Address City IN Zip: 616 Indiana Avenue, Rochester, IN 46975
Source Modification: 049-10821
Plt ID: 049-00002
Reviewer: Mark Kramer
Date: March 30, 1999

Permit #	Potential After Controls PM (tons/yr)		Potential After Controls PM-10 (tons/yr)		Potential PM Before Controls (tons/yr)	Potential PM-10 Before Controls (tons/yr)
CP 049-8548 Modification						
The existing facilities, emission factors, and control efficiencies from pg 4 of 23	15.2		14.4			
Proposed facilities with new emission factors and control efficiencies as well as an increase the limited melt capacity from 61,846 to 70,000 tpy from pg 8 of 23	23.0		12.9			
Does CP 049-8548 still comply with 326 IAC 2-2 that required that the modification be under 25 and 15 tpy for PM and PM-10, respectively?	**23.0**	**complies**	**12.9**	**complies**		
CP 049-9997 Modification						
The existing facilities, emission factors, and control efficiencies from pg 11 of 23	8.73		6.46			
Proposed facilities with new emission factors and control efficiencies from pg 14 of 23	8.53		3.81			
Does CP 049-9997 still comply with 326 IAC 2-2 that required that the modification be under 25 and 15 tpy for PM and PM-10, respectively?	**8.53**	**complies**	**3.81**	**complies**		
Source Modification 10821						
Full capacity with limits from CP 049-8548 and existing emission factors and control efficiencies from page 18 of 23 Note PM and PM-10 emissions represent the status of source, not any particular modification	20.5		19.7		2224.0	669.7
Full capacity with increased melt capacity of 70,000 tpy and new emission factors and control efficiencies from pg 22 of 23	**24.2**	**complies**	**14.2**	**complies**	2239.5	671.5
Change in emissions from the existing source due to changes in melt limit, emission factors and control efficiencies	**3.70**		**-5.50**		15.5	1.80
Are the proposed modifications in 049-10821 under PM = 25 tpy and PM-10 = 15 tpy to avoid applicability of 326 IAC 2-2?	**3.70**	**complies**	**-5.50**	**complies**		